Applicant

: Andreas Muth

Appln. No.

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-40. (cancelled)

41. (currently amended) A method of producing insulation elements made of mineral wool containing curable binder, comprising:

depositing insulation material comprising mineral wool and curable binder on a conveyor;

curing and transporting the insulation material through a tunnel furnace;

subjecting sections of the insulation material to controlled compaction in such a manner that at least one permanent impression and/or deformation is produced in the insulation blanket while the insulation material is curing during its passage through the tunnel furnace, furnace;

wherein the insulation material enters the tunnel furnace having a rectangular crosssectional profile and the insulation material is provided with impressed and/or deformed to produce a non-rectangular cross-sectional profile during curing.

- 42. (cancelled)
- 43. (previously presented) The method of claim 41, wherein: the mineral wool is rock wool.
- 44. (previously presented) The method of claim 41, wherein: the mineral wool is glass wool.
- 45. (cancelled)

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46. (previously presented) The method of claim 41, wherein: the cross-sectional profile comprises at least one depression or projection.

47. (previously presented) The method of claim 41, wherein:

the cross-sectional profile of the insulation element displays two parallel recesses in one surface.

48. (previously presented) The method of claim 41, wherein:

during the step of subjecting sections of the insulation material to controlled compaction, the insulation material is compacted to varying degrees, whereby a density within the insulation elements varies accordingly.

49-52. (cancelled)

53. (new) The method of claim 41, wherein:

the tunnel furnace has a molding device therein, the molding device reducing a cross section of a gap through which the insulation material is transported within the tunnel furnace and compacting the insulation material as it passes therethrough; and

the molding device is configured to provide the at least one permanent impression and/or deformation in the insulation material.

54. (new) The method of claim 53, wherein:

the molding device is integrated in the conveyor unit within the tunnel furnace, the conveyor unit comprising at least one first molding element to form the at least one permanent impression and/or deformation, during which process, as a result of contact with a molding surface of the at least one first molding element, the insulation material assumes the non-rectangular cross-sectional profile.

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55. (new) The method of claim 54, wherein:

the at least one first molding element is configured to contact the insulation material with a pressure contact.

56. (new) The method of claim 54, wherein:

the molding device has at least one second molding element opposite the at least one first molding element.

57. (new) The method of claim 54, wherein:

the at least one molding element comprises at least two molding elements.

58. (new) The method of claim 54, wherein:

the molding device further includes at least one lateral molding element.

59. (new) The method of claim 54, wherein:

the first molding element is formed by a compacting and guiding unit, which, together with the conveyor unit, compacts the insulation material or transports it at an upper side.

60. (new) The method of claim 59, wherein:

the compacting and guiding unit comprises a flight belt.

61. (new) The method of claim 56, wherein:

the first molding element and/or the second molding element are engineered as attachable elements for the conveyor unit or a compacting and guiding unit, which, together with the conveyor unit, compacts the insulation material or transports it at an upper side.

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62. (new) The method of claim 61, wherein:

the attachable elements and the conveyor unit are engineered as metal components that have the form of gratings or are provided with ventilation channels.

- 63. (new) The method of claim 62, wherein: the components are made of heat-resistant materials.
- 64. (new) The method of claim 62, wherein: the components are segmented.
- 65. (new) The method of claim 61, wherein:

the attachable elements for attachment to the conveyor and/or compacting and guiding unit have quick-release closures.

66. (new) The method of claim 56, wherein:

the first and/or second molding element is arranged such that with respect to a conveying plane of the conveyor unit, its molding surface is inclined about a longitudinal transport axis.

- 67. (new) The method of claim 49, wherein:
 the molding element of the molding device is engineered as an endless loop.
- 68. (new) The method of claim 67, wherein:
 the endless loop includes a plurality of successive segments.
- 69. (new) The method of claim 53, wherein:

the molding element is engineered such that a differing degree of compaction is obtained over a breadth of the molding surface.

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70. (new) The method of claim 53, wherein: the molding element has a contoured molding surface.

71. (new) The method of claim 70, wherein:
the contoured molding surface comprises an inclined planar surface.

72. (new) The method of claim 70, wherein:
the contoured molding surface comprises grooves and/or projections.

73. (new) The method of claim 41, wherein:

the mineral wool has the non-rectangular cross-sectional profile and areas of different density after being provided with the at least one permanent impression and/or deformation.

74. (new) The method of claim 73, wherein:

the mineral wool varies in height over the cross-sectional profile after being provided with the at least one permanent impression and/or deformation.

75. (new) The method of claim 73, wherein:

the insulation element has a higher density in thinner areas than in thicker areas after being provided with the at least one permanent impression and/or deformation.

76. (new) The method of claim 73, wherein:

the cross-sectional profile of the insulation element displays, in one surface, two parallel recesses in an area of which the density is higher than in very thick areas after being provided with the at least one permanent impression and/or deformation.